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## REMARKS/ARGUMENTS

Claims I, 2, 4-8, 10-17, 19 and 20 have been rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,466,649 to Walance. Additionally, claims 3, 9 and 18 have been rejected, under 35 U.S.C § 103(a) as being obvious over Walance in view of United States Patent No. 5,949,236 to Franchville.

The Examiner states that Walance teaches a method for estimating distances to irregularities on a subscriber loop comprising the steps of measuring a loop response as a function of frequency at a loop end, weighting the loop response with a pre-selected prolate spheroidal wave function to produce a weighted response and generating a spectral analysis of the weighted response wherein the estimated distances to the irregularities correspond to peaks in the spectral analysis. The Examiner cites column 1, lines 6-10, column 1, lines 60-67 and column 2, lines 5-31 as being the location in Walance that describes these claimed steps of independent claim 1. Applicant respectfully disagrees that Walance teaches the step of "weighting the loop response with a pre-selected prolate spheroidal wave function to produce a weighted response." At column 2, line 11, Walance states that the "response data is weighted to optimize the accuracy of the analysis." Walance does not, however, teach or suggest the use of a pre-selected prolate spheroidal wave function for such weighting. Applicant respectfully suggests that claims 1-5 are neither taught nor suggested by Walance alone or in conjunction with Frenchville for this reason.

Claim 6 has been amended to include the subject matter of claim 7 thereby including the use of a pre-selected prolate spheroidal wave function for producing the weighted response. Applicant does not agree with the Examiner that this step is taught or suggested by column 3, lines 37-49 of Walance. Because Applicant respectfully suggests that claim 6 is now allowable, dependent claims 8-12 should also be allowable.

Claim 13 has been rejected by the Examiner again in view of Walance. Applicant respectfully suggests that Walance does not disclose the steps of hypothesizing a set of loops having irregularities commensurate with the estimated distances to the irregularities and selecting one of the loops from the set by comparing the measured loop response from the selected one of the loops. Applicant does not find these steps disclosed at the locations in Walance cited by the Examiner (column 1, lines 60-67; column 2, lines 5-31; column, 3 lines 10-49) or elsewhere.

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There is no mention in Walance of using the technique of hypothesizing a set of possible loops and selecting the one loop from the set by comparing the measured loop response with the predicted loop response for each loop in the hypothesized set. Walance is aimed at measuring bridge taps not at identifying loop composition. In addition, the step of weighting the loop response with a prolate spheroidal wave function waveform in claim 14 is neither taught nor suggested by Walance at column 2, lines 10-31 or elsewhere (such as at column 3, lines 37-49 as suggested by the Examiner with respect to claim 7).

Likewise with respect to claim 15 the steps of hypothesizing and selecting are not disclosed by Walance. Additionally, the step of multiplying the loop response by a pre-selected prolate spheroidal wave function to produce the weighted response of claim 16 is not disclosed in Walance.

Applicant respectfully suggests that all independent claims, i.e., claims 1, 6 (as amended), 13 and 15 are allowable and, therefore, all dependent claims depending therefrom are also allowable. Applicant hereby requests reconsideration of claims 1-6 and 8-20, in view of the amendments and the above discussion, and allowance thereof is respectfully requested.

A petition for a one-month extension of time is attached.

Respectfully submitted,

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